TEST REPORT

Applicant:	Locshark,LLC
Address:	2504 Kent Street, Lubbock, Texas 79415
Equipment Type:	LocShark V1
Model Name:	LocShark V1
Brand Name:	LocShark
FCC ID:	2BO3I-LOCSHARK
Test Standard:	FCC 47 CFR Part 2.1093 (refer section 3.1)
Maximum SAR:	Body (1g @ 0mm): 0.70 W/kg
Sample Arrival Date:	Jun. 16,2025
Test Date:	Jul. 07, 2025
Date of Issue:	Jul. 23, 2025

ISSUED BY:

Shanghai Tejet Communications Technology Co., Ltd. Testing Center

Prepared by: Huang Xiaoqin

Reviewed by: Cai Xueguo

Approved by: Zhang Yanqing (Laboratory Manager)

Revision History

Version	Issue Date	Revisions Content
Rev. 01	Jul. 23, 2025	Initial Issue

TABLE OF CONTENTS

1 GENERAL INFORMATION

1.1 Test Laboratory

Name	Shanghai Tejet Communications Technology Co., Ltd. Testing Center
Address	1-2/F., Building 1, No.222, Xuanlan Road, Xuanqiao, Pudong New District, Shanghai, China

1.2 Test Location

Name	Shanghai Tejet Communications Technology Co., Ltd. Testing Center
Location	1-2/F., Building 1, No.222, Xuanlan Road, Xuanqiao, Pudong New District, Shanghai, China
Accreditation Certificate	The laboratory is a testing organization accredited by FCC as a accredited testing laboratory. The designation number is CN1352. The laboratory has been listed by Industry Canada to perform electromagnetic emission measurements. The recognition numbers of test site are 29671.

1.3 Test Environment Condition

Ambient Temperature	18℃ to 25℃
Ambient Relative Humidity	30% to 70%

2 PRODUCT INFORMATION

2.1 Applicant Information

Applicant	Locshark,LLC
Address	2504 Kent Street, Lubbock, Texas 79415

2.2 Manufacturer Information

Manufacturer	NOA Labs
Address	4th Floor, Building C, Yiou International Technology Park, No. 1, Liyuan 2nd Road, Zhancheng Community, Fuhai Street, Baoan District, 518103 Shenzhen, Guangdong, China.

2.3 General Description for Equipment under Test (EUT)

EUT Name	LocShark V1
Model Name Under Test	LocShark V1
Series Model Name	N/A
Description of Model name differentiation	N/A
Sample number	SC-SH2560056-S01
Hardware Version	LocShark_BV1
Software Version	LocShark_OS
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A

2.4 Ancillary Equipment

Ancillary Equipment 1	Battery	
	Brand Name	N/A
	Model No.	N/A
	Serial No.	N/A
	Capacity	3000 mAh
	Rated Voltage	3.7 V
	Limit Charge Voltage	4.2 V

2.5 Technical Information

Network and Wireless connectivity	LTE Cat M1 B2/4/12 GPS WIFI Scan

The requirement for the following technical information of the EUT was tested in this report:

Operating Mode	FDD LTE-M1		
Frequency Range	FDD LTE-M1 Band 2	TX: 1850 ~ 1910 MHz	RX: 1930 ~ 1990 MHz
	FDD LTE-M1 Band 4	TX: 1710 ~ 1755 MHz	RX: 2110 ~ 2155 MHz
	FDD LTE-M1 Band 12	TX: 699 ~ 716 MHz	RX: 729 ~ 746 MHz
Antenna Type	WWAN: PIFA Antenna		
DTM	N/A		
Hotspot Function	Not supported		
Power Reduction	Not supported		
Exposure Category	General Population/Uncontrolled exposure		
Product Type	Portable Device		
EUT Type	☒ Production unit	☐ Identical prototype	

3 SUMMARY OF TEST RESULT

3.1 Test Standards

No.	Identity	Document Title
1	47 CFR Part 2.1093	Radiofrequency radiation exposure evaluation: portable devices
2	IEEE Std. 1528-2013	IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate(SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques
3	KDB 447498 D04 v01	447498 D04 Interim General RF Exposure Guidance v01
4	KDB 941225 D05 v02r05	SAR Evaluation Considerations for LTE Devices
5	KDB 941225 D05A v01r02	REL. 10 LTE SAR TEST GUIDANCE AND KDB INQUIRIES
6	KDB 865664 D01 v01r04	SAR Measurement 100 MHz to 6 GHz
7	KDB 865664 D02 v01r02	RF Exposure Reporting

3.2 Device Category and SAR Limit

This device belongs to portable device category because its radiating structure is allowed to be used within 20 centimeters of the body of the user.

Limit for General Population/Uncontrolled exposure should be applied for this device, it is 1.6 W/kg as averaged over any 1 gram of tissue.

Table of Exposure Limits:

Body Position	SAR Value (W/Kg)	
	General Population/ Uncontrolled Exposure	Occupational/ ControlledExposure
Whole-Body SAR (averaged over the entire body)	0.08	0.4
Partial-Body SAR (averaged over any 1 gram of tissue)	1.60	8.0
SAR for hands, wrists, feet and ankles (averaged over any 10 grams of tissue)	4.0	20.0

NOTE:

General Population/Uncontrolled Exposure: Locations where there is the exposure of individuals who have no knowledge or control of their exposure. General population/uncontrolled exposure limits are applicable to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Members of the general public would come under this category when exposure is not employment-related; for example, in the case of a wireless transmitter that exposes persons in its vicinity.

Occupational/Controlled Exposure: Locations where there is exposure that may be incurred by persons who are aware of the potential for exposure, In general, occupational/controlled exposure limits are applicable to situations in which persons are exposed as a consequence of their employment, who have been made fully aware of the potential for exposure and can exercise control over their exposure. This exposure category is also applicable when the exposure is of a transient nature due to incidental passage through a location where the exposure levels may be higher than the general population/uncontrolled limits, but the exposed person is fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

3.3 Test Result Summary

3.3.1 Highest SAR Values

Frequency Band		Maximum Scaled SAR (W/kg) 1g
		Body (0mm)
LTE	LTE-M1 Band 2	0.70
	LTE-M1 Band 4	0.57
	LTE-M1 Band 12	0.09
Limits (W/kg)		1.6
Test Verdict		Pass
Note 1: The highest Reported Body 1g SAR value is 0.70 W/kg.		

3.4 Test Uncertainty

3.4.1 Measurement uncertainly evaluation for SAR test

The following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in IEC/IEEE 62209-1528. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

1) System Measurement Uncertainty (Frequency range from 300 MHz to 3 GHz)

DASY5 Uncertainty Budget (Frequency band: 300 MHz - 3 GHz range)								
Symbol	Error Description	Uncert. value	Prob. Dist.	Div.	(c_i) 1g	(c_i) 10g	Std. Unc. (1g)	Std. Unc. (10g)
Measurement System Errors								
CF	Probe Calibration	±12.0%	N	2	1	1	±6.0%	±6.0%
CF_{drift}	Probe Calibration Drift	±1.0%	N	1	1	1	±1.0%	±1.0%
LIN	Probe Linearity	±4.7%	R	√3	1	1	±2.7%	±2.7%
BBS	Broadband Signal	±3.0%	N	2	1	1	±1.5%	±1.5%
ISO	Probe Isotropy	±7.6%	R	√3	1	1	±4.4%	±4.4%
DAE	Data Acquisition	±0.3%	N	1	1	1	±0.3%	±0.3%
AMB	RF Ambient	±1.8%	N	1	1	1	±1.8%	±1.8%
Δ_{sys}	Probe Positioning	±0.2%	N	1	0.14	0.14	±0%	±0%
DAT	Data Processing	±1.2%	N	1	1	1	±1.2%	±1.2%
Phantom and Device Errors								
LIQ(σ)	Conductivity (meas.)^{DAK}	±2.5%	N	1	0.78	0.71	±2.0%	±1.8%
LIQ(T_σ)	Conductivity (temp.)^{BB}	±3.3%	R	√3	0.78	0.71	±1.5%	±1.4%
EPS	Phantom Permittivity	±14.0%	R	√3	0	0	±0%	±0%
DAS	Distance DUT - TSL	±2.1%	N	1	2	2	±4.2%	±4.2%
H	Device Holder	±3.8%	N	1	1	1	±3.8%	±3.8%
MOD	DUT Modulation^{m}	±2.4%	R	√3	1	1	±1.4%	±1.4%
TAS	Time-average SAR	±2.6%	R	√3	1	1	±1.5%	±1.5%
RF_{drift}	DUT drift	±5.0%	R	√3	1	1	±2.9%	±2.9%
Correction to the SAR results								
C(ε, σ)	Deviation to Target	±1.9%	N	1	1	0.84	±1.9%	±1.6%
C(R)	SAR scaling^{p}	±0%	R	√3	1	1	±0%	±0%
u(ΔSAR)	Combined Uncertainty	/	/	/	/	/	±11.2%	±11.0%
U	**Expanded Uncertainty**	**/**	/	/	/	/	±22.3%	±22.2%

2) System Measurement Uncertainty (Frequency range from 3 GHz to 6 GHz)

DASY5 Uncertainty Budget

(Frequency band: 3 GHz - 6 GHz range)

Symbol	Error Description	Uncert. value	Prob. Dist.	Div.	(c_i) 1g	(c_i) 10g	Std. Unc. (1g)	Std. Unc. (10g)
Measurement System Errors								
CF	Probe Calibration	±14.0%	N	2	1	1	±7.0%	±7.0%
CF_{drift}	Probe Calibration Drift	±1.0%	N	1	1	1	±1.0%	±1.0%
LIN	Probe Linearity	±4.7%	R	√3	1	1	±2.7%	±2.7%
BBS	Broadband Signal	±3.0%	N	2	1	1	±1.5%	±1.5%
ISO	Probe Isotropy	±7.6%	R	√3	1	1	±4.4%	±4.4%
DAE	Data Acquisition	±0.3%	N	1	1	1	±0.3%	±0.3%
AMB	RF Ambient	±1.8%	N	1	1	1	±1.8%	±1.8%
Δ_{sys}	Probe Positioning	±0.2%	N	1	0.33	0.33	±0.1%	±0.1%
DAT	Data Processing	±2.3%	N	1	1	1	±2.3%	±2.3%
Phantom and Device Errors								
LIQ(σ)	Conductivity (meas.)[DAK]	±2.5%	N	1	0.78	0.71	±2.0%	±1.8%
$LIQ(T_\sigma)$	Conductivity (temp.)[BB]	±3.4%	R	√3	0.78	0.71	±1.5%	±1.4%
EPS	Phantom Permittivity	±14.0%	R	√3	0.25	0.25	±2.0%	±2.0%
DAS	Distance DUT - TSL	±2.1%	N	1	2	2	±4.2%	±4.2%
H	Device Holder	±3.8%	N	1	1	1	±3.8%	±3.8%
MOD	DUT Modulation[m]	±2.4%	R	√3	1	1	±1.4%	±1.4%
TAS	Time-average SAR	±2.6%	R	√3	1	1	±1.5%	±1.5%
RF_{drift}	DUT drift	±5.0%	R	√3	1	1	±2.9%	±2.9%
Correction to the SAR results								
C(ε, σ)	Deviation to Target	±1.9%	N	1	1	0.84	±1.9%	±1.6%
C(R)	SAR scaling[p]	±0%	R	√3	1	1	±0%	±0%
u(ΔSAR)	Combined Uncertainty	/	/	/	/	/	±12.1%	±12.0%
U	**Expanded Uncertainty**	**/**	/	/	/	/	±24.2%	±24.0%

3.4.2 Measurement uncertainly evaluation for system check

This measurement uncertainty budget is suggested by IEC/IEEE 62209-1528. The breakdown of the individual uncertainties is as follows:

DASY5 Uncertainty Budget (Frequency band: 300 MHz - 6 GHz range)								
Symbol	Error Description	Uncert. value	Prob. Dist.	Div.	(c_i) 1g	(c_i) 10g	Std. Unc. (1g)	Std. Unc. (10g)
Measurement System Errors								
CF	Probe Calibration	±14.0%	N	2	1	1	±7.0%	±7.0%
CF_{drift}	Probe Calibration Drift	±1.0%	N	1	1	1	±1.0%	±1.0%
LIN	Probe Linearity	±4.7%	R	√3	1	1	±2.7%	±2.7%
BBS	Broadband Signal	±0.0%	N	2	1	1	±0.0%	±0.0%
ISO	Probe Isotropy	±7.6%	R	√3	1	1	±4.4%	±4.4%
DAE	Data Acquisition	±0.3%	N	1	1	1	±0.3%	±0.3%
AMB	RF Ambient	±1.8%	N	1	1	1	±1.8%	±1.8%
Δ_{sys}	Probe Positioning	±0.2%	N	1	0.33	0.33	±0%	±0%
Phantom and Device Errors								
LIQ(σ)	Conductivity (meas.)^{DAK}	±2.5%	N	1	0.78	0.71	±2.0%	±1.8%
LIQ(T_σ)	Conductivity (temp.)^{BB}	±3.4%	R	√3	0.78	0.71	±1.5%	±1.4%
EPS	Phantom Permittivity	±14.0%	R	√3	0.25	0.25	±2.0%	±2.0%
DAS	Distance DUT - TSL	±1.0%	N	1	2	2	±2.0%	±2.0%
VAL	Validation antenna	±0.0%	R	√3	1	1	±0.0%	±0.0%
P_{in}	Accepted power	±1.2%	N	1	1	1	±1.2%	±1.2%
RF_{drift}	DUT drift	±5.0%	R	√3	1	1	±2.9%	±2.9%
Correction to the SAR results								
C(ε, σ)	Deviation to Target	±1.9%	N	1	1	0.84	±1.9%	±1.6%
u(ΔSAR)	Combined Uncertainty	/	/	/	/	/	±10.4%	±10.3%
U	**Expanded Uncertainty**	**/**	/	/	/	/	±20.7%	±20.5%

4 MEASUREMENT SYSTEM

4.1 Specific Absorption Rate (SAR) Definition

SAR is related to the rate at which energy is absorbed per unit mass in an object exposed to a radio field. The SAR distribution in a biological body is complicated and is usually carried out by experimental techniques or numerical modeling. The standard recommends limits for two tiers of groups, occupational/controlled and general population/uncontrolled, based on a person's awareness and ability to exercise control over his or her exposure. In general, occupational/controlled exposure limits are higher than the limits for general population/uncontrolled.

The SAR definition is the time derivative (rate) of the incremental energy (dW) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dv) of a given density (ρ). The equation description is as below:

$$\mathbf{SAR} = \frac{d}{\mathrm{dt}}\left(\frac{d\mathrm{W}}{\mathrm{dm}}\right) = \frac{d}{\mathrm{dt}}\left(\frac{d\mathrm{W}}{\rho \mathrm{dv}}\right)$$

SAR is expressed in units of Watts per kilogram (W/kg) SAR measurement can be related to the electrical field in the tissue by

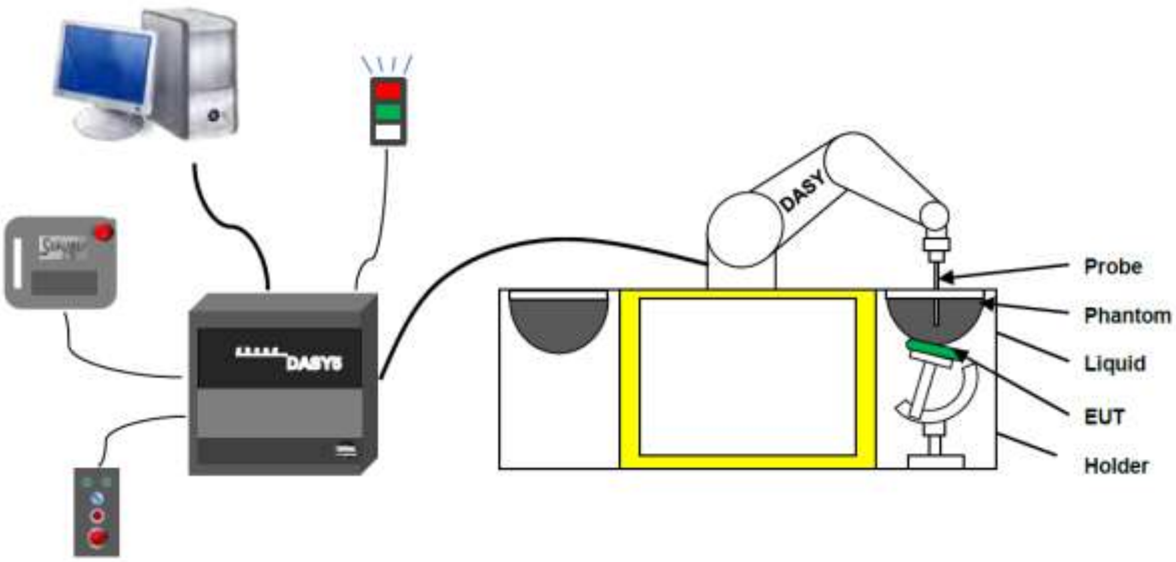
$$\mathbf{SAR} = \frac{\sigma E^2}{\rho}$$

Where: σ is the conductivity of the tissue,

ρ is the mass density of the tissue and E is the RMS electrical field strength.

4.2 DASY SAR System

4.2.1 DASY SAR System Diagram

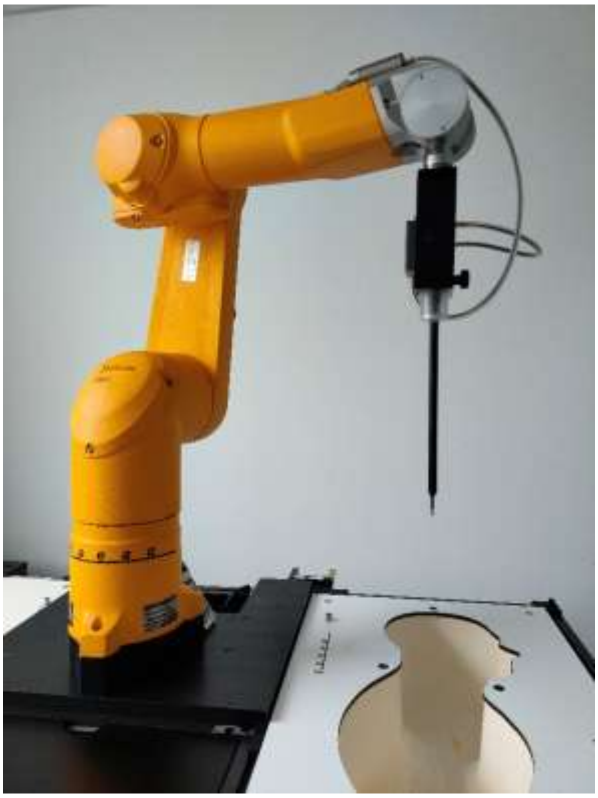


The DASY5 system for performing compliance tests consists of the following items:

1. A standard high precision 6-axis robot (Stäubli RX family) with controller and software. An arm extension for accommodating the data acquisition electronics (DAE).
2. A dosimetric probe, i.e. an isotropic E-field probe optimized and calibrated for usage in tissue simulating liquid. The probe is equipped with an optical surface detector system.
3. A data acquisition electronic (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
4. A unit to operate the optical surface detector which is connected to the EOC.
5. The Electro-Optical Coupler (EOC) performs the conversion from the optical into a digital electric signal of the DAE. The EOC is connected to the DASY5 measurement server.
6. The DASY5 measurement server, which performs all real-time data evaluation for field measurements and surface detection, controls robot movements and handles safety operation.
7. DASY5 software and SEMCAD data evaluation software.
8. Remote control with teach panel and additional circuitry for robot safety such as warning lamps, etc.
9. The generic twin phantom enabling the testing of left-hand and right-hand usage.
10. The device holder for handheld mobile phones.
11. Tissue simulating liquid mixed according to the given recipes.
12. System validation dipoles allowing to validate the proper functioning of the system.

4.2.2 Robot

The Dasy SAR system uses the high precision robots. Symmetrical design with triangular core Built-in optical fiber for surface detection system For the 6-axis controller system, Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents). The robot series have many features that are important for our application:



- High precision
  (repeatability ±0.02 mm)
- High reliability
  (industrial design)
- Low maintenance costs
  (virtually maintenance free due to direct drive gears; no belt drives)
- Jerk-free straight movements
  (brush less synchron motors; no stepper motors)
- Low ELF interference
  (motor control _elds shielded via the closed metallic construction shields)

4.2.3 E-Field Probe

The probe is specially designed and calibrated for use in liquids with high permittivities for the measurements the Specific Dosimetric E-Field Probe EX3DV4 with following specifications is used.

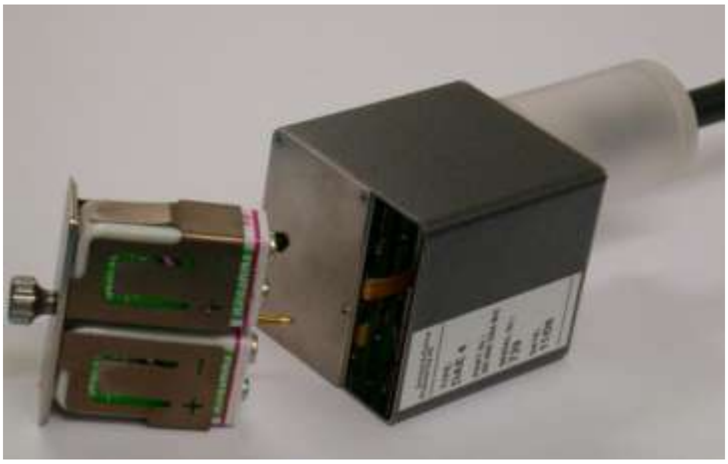
Construction	Symmetrical design with triangular core Built-in optical fiber for surface detection system Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., glycolether)
Calibration	ISO/IEC 17025 calibration service available
Frequency	4 MHz to 10 GHz; Linearity: ± 0.2 dB
Directivity	± 0.2 dB in HSL (rotation around probe axis) ; ± 0.4 dB in HSL (rotation normal to probe axis)
Dynamic range	5 μW/g to > 100 mW/g; Linearity: ± 0.2 dB
Dimensions	Overall length: 337 mm (Tip: 9 mm) Tip diameter: 2.5 mm (Body: 10 mm) Distance from probe tip to dipole centers: 1.0 mm
Application	General dosimetry up to 3 GHz Compliance tests of mobile phones Fast automatic scanning in arbitrary phantoms (EX3DV4)

E-Field Probe Calibration Process

Probe calibration is realized, in compliance with IEC/IEEE 62209-1528 and IEEE 1528 std, with CALISAR, Antennessa proprietary calibration system. The calibration is performed with the IEC/IEEE 62209-1528 annexe technique using reference guide at the five frequencies.

4.2.4 Data Acquisition Electronics

The data acquisition electronics (DAE) consist of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converte and a command decoder with a control logic unit. Transmission to the measurement server is accomplished through an optical downlink for data and status information, as well as an optical uplink for commands and the clock.



- Input Impedance: 200MOhm
- The Inputs: Symmetrical and Floating
- Commom Mode Rejection: Above 80dB

4.2.5 Phantoms

For the measurements the Specific Anthropomorphic Mannequin (SAM) defined by the IEEE SCC-34/SC2 group is used. The phantom is a polyurethane shell integrated in a wooden table. The thickness of the phantom amounts to 2mm +/- 0.2mm. It enables the dosimetric evaluation of left and right phone usage and includes an additional flat phantom part for the simplified performance check. The phantom set-up includes a cover, which prevents the evaporation of the liquid.

Photo of Phantom SN1086

Serial Number	Shell Thickness (mm)	Major ellipse axis (mm)	Minor axis（mm）
SN 1086 ELI4	2.0 ± 0.2	600	500

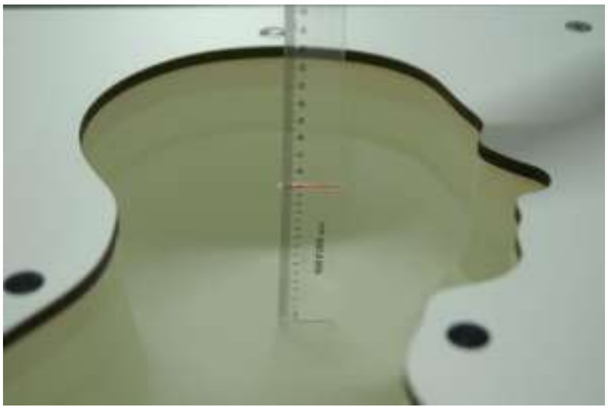
4.2.6 Device Holder

The DASY5 device holder has two scales for device rotation (with respect to the body axis) and the device inclination (with respect to the line between the ear openings). The plane between the ear openings and the mouth tip has a rotation angle of 65°. The bottom plate contains three pair of bolts for locking the device holder. The device holder positions are adjusted to the standard measurement positions in the three sections. This device holder is used for standard mobile phones or PDA‟s only. If necessary an additional support of polystyrene material is used. Larger DUT‟s (e.g. notebooks) cannot be tested using this device holder. Instead a support of bigger polystyrene cubes and thin polystyrene plates is used to position the DUT in all relevant positions to find and measure spots with maximum SAR values. Therefore those devices are normally only tested at the flat part of the SAM.

The positioning system allows obtaining cheek and tilting position with a very good accuracy. Incompliance with CENELEC, the tilt angle uncertainty is lower than 1°.

4.2.7 Simulating Liquid

For SAR measurement of the field distribution inside the phantom, the phantom must be filled with homogeneous tissue simulating liquid to a depth of at least 15 cm. For head SAR testing, the liquid height from the ear reference point (ERP) of the phantom to the liquid top surface is larger than 15 cm. For body SAR testing, the liquid height from the center of the flat phantom to the liquid top surface is larger than 15 cm. The nominal dielectric values of the tissue simulating liquids in the phantom and the tolerance of 5%.

Head Liquid Depth	**Body Liquid Depth**
	

The following table gives the recipes for tissue simulating liquid.

TSL	Manufacturer / Model	Freq Range (MHz)	Main Ingredients
Head WideBand	SPEAG HBBL600-10000V6	600-10000	Ethanediol, Sodium petroleum sulfonate, Hexylene Glycol / 2-Methyl-pentane-2.4-diol, Alkoxylated alcohol

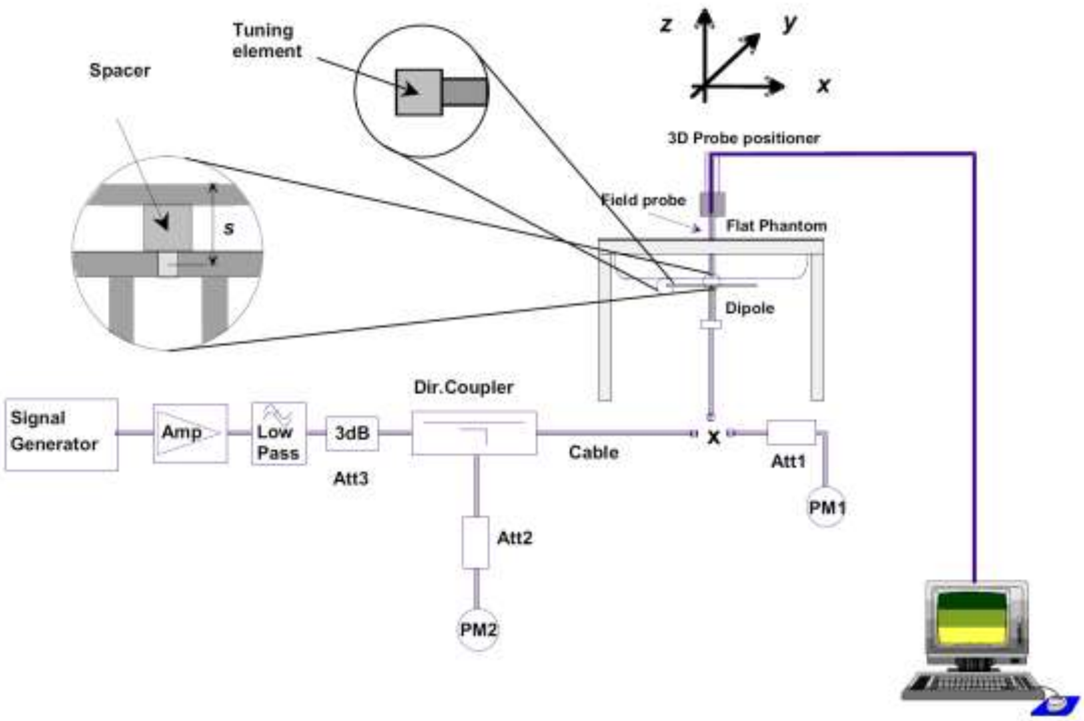
5 SYSTEM VERIFICATION

5.1 Purpose of System Check

The system performance check verifies that the system operates within its specifications. System and operator errors can be detected and corrected. It is recommended that the system performance check be performed prior to any usage of the system in order to guarantee reproducible results. The system performance check uses normal SAR measurements in a simplified setup with a well characterized source.This setup was selected to give a high sensitivity to all parameters that might fail or vary over time. The system check does not intend to replace the calibration of the components, but indicates situations where the system uncertainty is exceeded due to drift or failure.

5.2 System Check Setup

In the simplified setup for system evaluation, the EUT is replaced by a calibrated dipole and the power source is replaced by a continuous wave that comes from a signal generator. The calibrated dipole must be placed beneath the flat phantom section of the SAM twin phantom with the correct distance holder. The distance holder should touch the phantom surface with a light pressure at the reference marking and be oriented parallel to the long side of the phantom. The equipment setup is shown below:

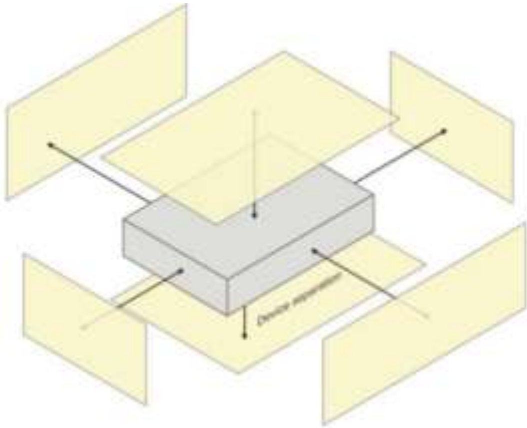


6 TEST POSITION CONFIGURATIONS

According to KDB 648474 D04 Handset, handsets are tested for SAR compliance in head, body-worn accessory and other use configurations described in the following subsections.

Hotspot Mode Exposure Position Conditions

For handsets that support hotspot mode operations, with wireless router capabilities and various web browsing functions, the relevant hand and body exposure conditions are tested according to the hotspot SAR procedures in KDB 941225. A test separation distance of 10 mm is required between the phantom and all surfaces and edges with a transmitting antenna located within 25 mm from that surface or edge. When the form factor of a handset is smaller than 9 cm x 5 cm, a test separation distance of 5 mm (instead of 10 mm) is required for testing hotspot mode. When the separation distance required for body-worn accessory testing is larger than or equal to that tested for hotspot mode, in the same wireless mode and for the same surface of the phone, the hotspot mode SAR data may be used to support body-worn accessory SAR compliance for that particular configuration (surface).



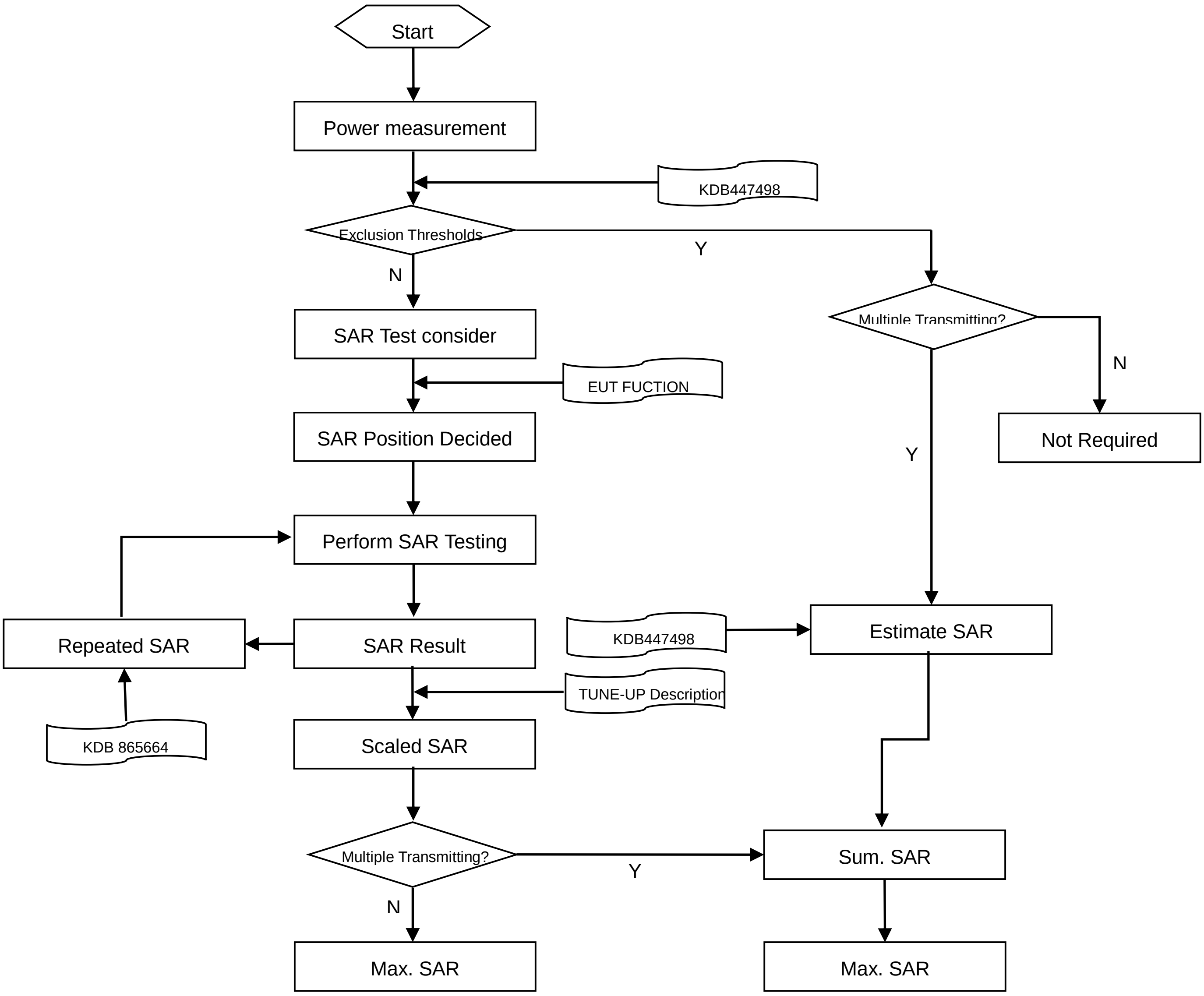
6.1 Product Specific 10g Exposure Consideration

According with FCC KDB 648474 D04, for smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm that provide similar mobile web access and multimedia support found in mini-tablets or UMPC mini-tablets that support voice calls next to the ear, unless it is confirmed otherwise through KDB inquiries, the following phablet procedures should be applied to evaluate SAR compliance for each applicable wireless modes and frequency band. Devices marketed as phablets, regardless of form factors and operating characteristics must be tested as a phablet to determine SAR compliance;

The UMPC mini-tablet procedures must also be applied to test the SAR of all surfaces and edges with an antenna located at ≤ 25 mm from that surface or edge, in direct contact with a flat phantom, for 10-g extremity SAR according to the body-equivalent tissue dielectric parameters in KDB 865664 to address interactive hand use exposure conditions. The UMPC mini-tablet 1-g SAR at 5 mm is not required. When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg.

7 MEASUREMENT PROCEDURE

7.1 Measurement Process Diagram



7.2 SAR Scan General Requirement

Probe boundary effect error compensation is required for measurements with the probe tip closer than half a probe tip diameter to the phantom surface. Boththe probe tip diameter and sensor offset distance must satisfy measurement protocols; to ensure probe boundary effect errors are minimized and the higher fields closest to the phantom surface can be correctly measured and extrapolated to the phantom surface for computing 1 g SAR. Tolerances of the post-processing algorithms must be verified by the test laboratory for the scan resolutions used in the SAR measurements, according to the reference distribution functions specified in IEEE Std 1528-2013.

<table>
<tr><th colspan="3"></th><th>≤3GHz</th><th>>3GHz</th></tr>
<tr><td colspan="3">Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface</td><td>5±1 mm</td><td>½·δ·ln(2)±0.5 mm</td></tr>
<tr><td colspan="3">Maximum probe angle from probe axis to phantom surface normal at the measurement location</td><td>30°±1°</td><td>20°±1°</td></tr>
<tr><td colspan="3" rowspan="2">Maximum area scan spatial resolution: Δx Area , Δy Area</td><td>≤ 2 GHz: ≤ 15 mm
2 – 3 GHz: ≤ 12 mm</td><td>3–4 GHz: ≤ 12 mm
4 – 6 GHz: ≤ 10 mm</td></tr>
<tr><td colspan="2">When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be ≤ the corresponding x or y dimension of the test device with at least one measurement point on the test device.</td></tr>
<tr><td colspan="3">Maximum zoom scan spatial resolution: Δx Zoom , Δy Zoom</td><td>≤ 2 GHz: ≤ 8 mm
2 –3 GHz: ≤ 5 mm*</td><td>3–4 GHz: ≤ 5 mm*
4 – 6 GHz: ≤ 4 mm*</td></tr>
<tr><td rowspan="7">Maximum zoom scan spatial resolution, normal to phantom surface</td><td colspan="2" rowspan="3">uniform grid: Δz Zoom (n)</td><td rowspan="3">≤ 5 mm</td><td>3–4 GHz: ≤ 4 mm</td></tr>
<tr><td>4–5 GHz: ≤ 3 mm</td></tr>
<tr><td>5–6 GHz: ≤ 2 mm</td></tr>
<tr><td rowspan="4">graded grid</td><td rowspan="3">Δz Zoom (1): between 1st two points closest to phantom surface</td><td rowspan="3">≤ 4 mm</td><td>3–4 GHz: ≤ 3 mm</td></tr>
<tr><td>4–5 GHz: ≤ 2.5 mm</td></tr>
<tr><td>5–6 GHz: ≤ 2 mm</td></tr>
<tr><td>Δz Zoom (n>1): between subsequent points</td><td colspan="2">≤ 1.5·Δz Zoom (n-1)</td></tr>
<tr><td rowspan="3">Minimum zoom scan volume</td><td colspan="2" rowspan="3">x, y, z</td><td rowspan="3">≥30 mm</td><td>3–4 GHz: ≥ 28 mm</td></tr>
<tr><td>4–5 GHz: ≥ 25 mm</td></tr>
<tr><td>5–6 GHz: ≥ 22 mm</td></tr>
<tr><td colspan="5">Note:
1. δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.
2. * When zoom scan is required and the reported SAR from the area scan based 1 g SAR estimation procedures of KDB 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 5 mm zoom scan resolution may be applied, respectively, for 2 GHz to 3GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.</td></tr>
</table>

7.3 Measurement Procedure

The following steps are used for each test position

a. Establish a call with the maximum output power with a base station simulator. The connection between the mobile and the base station simulator is established via air interface
b. Measurement of the local E-field value at a fixed location. This value serves as a reference value for calculating a possible power drift.
c. Measurement of the SAR distribution with a grid of 8 to 16mm * 8 to16 mm and a constant distance to the inner surface of the phantom. Since the sensors cannot directly measure at the inner phantom surface, the values between the sensors and the inner phantom surface are extrapolated. With these values the area of the maximum SAR is calculated by an interpolation scheme.
d. Around this point, a cube of 30 * 30 * 30 mm or 32 * 32 *32 mm is assessed by measuring 5 or 8 * 5 or 8*4 or 5 mm. With these data, the peak spatial-average SAR value can be calculated.

7.4 Area & Zoom Scan Procedure

First Area Scan is used to locate the approximate location(s) of the local peak SAR value(s). The measurement grid within an Area Scan is defined by the grid extent, grid step size and grid offset. Next, in order to determine the EM field distribution in a three-dimensional spatial extension, Zoom Scan is required. The Zoom Scan is performed around the highest E-field value to determine the averaged SAR-distribution over 10 g. Area scan and zoom scan resolution setting follows KDB 865664 D01v01r04 quoted below.
When the 1 g SAR of the highest peak is within 2 dB of the SAR limit, additional zoom scans are required for other peaks within 2 dB of the highest peak that have not been included in any zoom scan to ensure there is no increase in SAR.

8 CONDUCTED RF OUPUT POWER

8.1 LTE-M1 Band2 Output Power

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				18700	18900	19100	
Frequency (MHz)				1860	1880	1900	
20	1	0	QPSK	22.55	22.59	22.37	23.50
	6	0	QPSK	22.89	22.94	22.74	24.00
	1	0	16QAM	21.86	21.88	21.74	23.00
	5	0	16QAM	22.17	22.19	22.01	22.50
Channel				18675	18900	19125	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	1	0	QPSK	22.56	22.57	22.35	23.50
	6	0	QPSK	22.92	22.93	22.74	24.00
	1	0	16QAM	21.88	21.93	21.83	23.00
	5	0	16QAM	22.17	22.22	22.02	22.50
Channel				18650	18900	19150	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	1	0	QPSK	22.56	22.58	22.41	23.50
	6	0	QPSK	21.96	21.95	21.82	23.00
	1	0	16QAM	21.88	22.05	21.79	23.00
	5	0	16QAM	21.22	21.29	21.14	22.50
Channel				18625	18900	19175	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	1	0	QPSK	22.58	22.55	22.67	23.50
	6	0	QPSK	21.94	21.99	21.64	23.00
	1	0	16QAM	22.10	21.94	22.80	23.00
	5	0	16QAM	20.23	20.20	19.95	21.00
Channel				18615	18900	19185	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	1	0	QPSK	22.42	22.44	22.27	23.50
	6	0	QPSK	21.82	21.81	21.68	23.00
	1	0	16QAM	21.74	21.91	21.65	23.00
	5	0	16QAM	21.08	21.15	21.00	22.00
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	1	0	QPSK	22.44	22.41	22.53	23.50
	6	0	QPSK	21.80	21.85	21.50	23.00
	1	0	16QAM	21.96	21.80	22.66	23.00
	5	0	16QAM	20.09	20.06	19.81	21.00

8.2 LTE-M1 Band4 Output Power

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				20050	20175	20300	
Frequency (MHz)				1720	1732.5	1745	
20	1	0	QPSK	22.85	22.84	22.80	23.50
	6	0	QPSK	23.11	23.13	23.08	24.00
	1	0	16QAM	22.43	22.32	22.34	23.50
	5	0	16QAM	22.41	22.39	22.37	23.50
Channel				20025	20175	20325	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1732.5	1747.5	
15	1	0	QPSK	22.84	22.79	22.72	23.50
	6	0	QPSK	23.11	23.11	23.08	24.00
	1	0	16QAM	22.38	22.32	22.23	23.50
	5	0	16QAM	22.41	22.37	22.32	23.50
Channel				20000	20175	20350	Tune-up limit (dBm)
Frequency (MHz)				1715	1732.5	1750	
10	1	0	QPSK	22.86	22.80	22.71	23.50
	6	0	QPSK	22.14	22.14	22.07	23.00
	1	0	16QAM	22.46	22.36	22.22	23.50
	5	0	16QAM	21.47	21.47	21.38	22.50
Channel				19975	20175	20375	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1732.5	1752.5	
5	1	0	QPSK	22.87	22.80	22.68	23.50
	6	0	QPSK	22.25	22.19	22.06	23.00
	1	0	16QAM	22.48	22.19	22.25	23.50
	5	0	16QAM	20.44	20.37	20.27	21.50
Channel				19965	20175	20385	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1732.5	1753.5	
3	1	0	QPSK	22.69	22.63	22.54	23.50
	6	0	QPSK	21.97	21.97	21.90	23.00
	1	0	16QAM	22.29	22.19	22.05	23.00
	5	0	16QAM	21.30	21.30	21.38	22.50
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	1	0	QPSK	22.70	22.63	22.51	23.50
	6	0	QPSK	22.08	22.02	21.89	23.00
	1	0	16QAM	22.31	22.02	22.08	23.00
	5	0	16QAM	20.27	20.20	20.10	21.50

8.3 LTE-M1 Band4 Output Power

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				23060	23095	23130	
Frequency (MHz)				704	707.5	711	
10	1	0	QPSK	22.42	22.45	22.43	23.50
	6	0	QPSK	21.59	21.62	21.48	22.50
	1	0	16QAM	22.01	22.02	22.41	23.00
	5	0	16QAM	20.94	20.93	20.62	22.00
Channel				23035	23095	23155	Tune-up power(dBm)
Frequency (MHz)				701.5	707.5	713.5	
5	1	0	QPSK	22.41	22.44	22.40	23.50
	6	0	QPSK	21.67	21.70	21.54	22.50
5	1	0	16QAM	21.83	21.86	21.78	23.00
	5	0	16QAM	19.88	19.94	19.74	21.00
Channel				23025	23095	23165	Tune-up power(dBm)
Frequency (MHz)				700.5	707.5	714.5	
3	1	0	QPSK	22.29	22.32	22.31	23.50
	6	0	QPSK	21.46	21.49	21.35	22.50
3	1	0	16QAM	21.88	21.89	22.39	23.00
	5	0	16QAM	20.81	20.80	20.49	22.00
Channel				23017	23095	23173	Tune-up power(dBm)
Frequency (MHz)				699.7	707.5	715.3	
1.4	1	0	QPSK	22.31	22.31	22.33	23.50
	6	0	QPSK	21.54	21.57	21.41	22.50
1.4	1	0	16QAM	21.70	21.73	21.26	23.00
	5	0	16QAM	19.75	19.81	19.61	20.50

9 TEST RESULT

9.1 LTE-M1 Band 2 (20MHz Bandwidth)

Position	Dist. (mm)	Test Mode	Ch.	Freq (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas No.
Body													
Front Side	0	QPSK	18900	1880	1	0	0.13	0.296	22.59	23.50	1.233	0.365	/
Back side			18900	1880	1	0	-0.19	0.555	22.59	23.50	1.233	0.684	/
Left side			18900	1880	1	0	-0.03	0.123	22.59	23.50	1.233	0.152	/
Right side			18900	1880	1	0	0.12	0.038	22.59	23.50	1.233	0.047	/
Top side			18900	1880	1	0	0.1	0.026	22.59	23.50	1.233	0.032	/
Bottom side			18900	1880	1	0	0.05	0.039	22.59	23.50	1.233	0.048	/
Front Side	0	QPSK	18900	1880	6	0	-0.19	0.102	22.94	24.00	1.276	0.130	/
Back side			18900	1880	6	0	0.02	0.548	22.94	24.00	1.276	**0.699**	1
Left side			18900	1880	6	0	0.13	0.115	22.94	24.00	1.276	0.147	/
Right side			18900	1880	6	0	0.11	0.016	22.94	24.00	1.276	0.020	/
Top side			18900	1880	6	0	0.12	0.050	22.94	24.00	1.276	0.064	/
Bottom side			18900	1880	6	0	-0.18	0.022	22.94	24.00	1.276	0.028	/

9.2 LTE-M1 Band 4 (20MHz Bandwidth)

Position	Dist. (mm)	Test Mode	Ch.	Freq (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas No.
Body													
Front Side	0	QPSK	20175	1732.5	1	0	0.17	0.087	22.84	23.50	1.164	0.101	/
Back side			20175	1732.5	1	0	0.11	0.490	22.84	23.50	1.164	0.570	2
Left side			20175	1732.5	1	0	-0.01	0.061	22.84	23.50	1.164	0.071	/
Right side			20175	1732.5	1	0	-0.13	0.013	22.84	23.50	1.164	0.015	/
Top side			20175	1732.5	1	0	-0.11	0.018	22.84	23.50	1.164	0.021	/
Bottom side			20175	1732.5	1	0	0.18	0.009	22.84	23.50	1.164	0.010	/
Front Side	0	QPSK	20175	1732.5	6	0	0.15	0.096	23.13	24.00	1.222	0.117	/
Back side			20175	1732.5	6	0	0.18	0.430	23.13	24.00	1.222	0.525	/
Left side			20175	1732.5	6	0	0.16	0.097	23.13	24.00	1.222	0.119	/
Right side			20175	1732.5	6	0	0.07	0.012	23.13	24.00	1.222	0.015	/
Top side			20175	1732.5	6	0	0.03	0.019	23.13	24.00	1.222	0.023	/
Bottom side			20175	1732.5	6	0	-0.03	0.004	23.13	24.00	1.222	0.005	/

9.3 **LTE-M1 Band 12 (10MHz Bandwidth)**

Position	Dist. (mm)	Test Mode	Ch.	Freq (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas No.
Body													
Front Side	0	QPSK	23095	707.5	1	0	-0.12	0.013	22.45	23.50	1.274	0.017	/
Back side			23095	707.5	1	0	0.17	0.068	22.45	23.50	1.274	0.087	3
Left side			23095	707.5	1	0	-0.03	0.025	22.45	23.50	1.274	0.032	/
Right side			23095	707.5	1	0	-0.13	0.040	22.45	23.50	1.274	0.051	/
Top side			23095	707.5	1	0	0.04	0.007	22.45	23.50	1.274	0.009	/
Bottom side			23095	707.5	1	0	0.02	0.009	22.45	23.50	1.274	0.011	/
Front Side	0	QPSK	23095	707.5	6	0	-0.18	0.018	21.62	22.50	1.225	0.022	/
Back side			23095	707.5	6	0	0.19	0.050	21.62	22.50	1.225	0.061	/
Left side			23095	707.5	6	0	-0.04	0.015	21.62	22.50	1.225	0.018	/
Right side			23095	707.5	6	0	0.09	0.026	21.62	22.50	1.225	0.032	/
Top side			23095	707.5	6	0	-0.14	0.008	21.62	22.50	1.225	0.010	/
Bottom side			23095	707.5	6	0	-0.19	0.009	21.62	22.50	1.225	0.011	/

10 TEST EQUIPMENTS LIST

Description	Manufacturer	Model	Serial No./Version	Cal. Date	Cal. Due
PC	Dell	N/A	N/A	N/A	N/A
Test Software	Speag	DASY5	52.10.4.1535	N/A	N/A
750MHz Validation Dipole	Speag	D750V3	1201	2024/09/03	2027/09/03
1750MHz Validation Dipole	Speag	D1750V2	1183	2024/09/03	2027/09/03
1900MHz Validation Dipole	Speag	D1900V2	5d155	2024/09/02	2027/09/02
Data Acquisition Electronicsr	Speag	DAE4	540	2025/04/21	2026/04/21
E-Field Probe	Speag	EX3DV4	3748	2025/04/24	2026/04/24
Signal Generator	R&S	SMB100A	182635	2025/02/12	2026/02/12
Power Meter	Agilent	E4419B	MY45104512	2025/02/11	2026/02/11
Power Sensor	Agilent	E9304A	MY41499059	2025/02/11	2026/02/11
Power Sensor	Agilent	E9304A	MY41499060	2025/02/11	2026/02/11
Wireless Communication Test Set	R&S	CMW500	168792	2025/02/11	2026/02/11
Network Analyzer	Agilent	E5071C	MY56301409	2025/02/12	2026/02/12
Thermometer	CEM	DT-322	210402350	2025/01/22	2026/01/22
Thermometer	Elitech	RC-4HC	EF7247001275	2025/01/22	2026/01/22
Power Amplifier	COM-MW	PAO.4	201704001	N/A	N/A
Dielectric Probe Kit	Keysight	85070E	MY44300524	N/A	N/A
Phantom	Speag	SAM	1086	N/A	N/A
Attenuator	COM-MW	ZA-S1-31	1305003187	N/A	N/A
Directional coupler	AA-MCS	AAMCS-UDC	000272	N/A	N/A

Note: For dipole antennas, Tejet has adopted 3 years as calibration intervals, and on annual basis, every measurement dipole has been evaluated and is in compliance with the following criteria:

1. There is no physical damage on the dipole;
2. System validation with specific dipole is within 10% of calibrated value;
3. Return-loss in within 20% of calibrated measurement.
4. Impedance (real or imaginary parts) in within 5 Ohms of calibrated measurement.

ANNEX A SIMULATING LIQUID VERIFICATION RESULT

The dielectric parameters of the liquids were verified prior to the SAR evaluation using an 85070E Dielectric Probe Kit.

Head Liquid

Date	Liquid Type	Fre. (MHz)	Temp. (℃)	Meas. Conductivity (σ) (S/m)	Meas. Permittivity (ε)	Target Conductivity (σ) (S/m)	Target Permittivity (ε)	Conductivity Tolerance (%)	Permittivity Tolerance (%)
2025.7.7	Head	750	21.4	0.89	43.05	0.89	41.94	0.00	2.65
2025.7.7	Head	1750	21.4	1.40	39.48	1.37	40.08	2.19	-1.50
2025.7.7	Head	1900	21.4	1.46	39.19	1.40	40.00	4.29	-2.03
Note: The tolerance limit of Conductivity and Permittivity is± 5%.									

ANNEX B   SYSTEM CHECK RESULT

Comparing to the original SAR value provided by Keysight, the validation data should be within itsspecification of 10 %(for 1 g).

Head liquid 1g

Date	Freq. (MHz)	Power (mW)	Measured SAR (W/kg)	Normalized SAR (W/kg)	Dipole SAR (W/kg)	Tolerance (%)
2025.7.7	750	100	0.839	8.39	8.46	-0.83
2025.7.7	1750	100	3.690	36.90	37.00	-0.27
2025.7.7	1900	100	4.360	43.60	41.70	4.56
Note: The tolerance limit of System validation ±10%.						

System Performance Check Data (750MHz)

Date: 2025/7/7
Communication System Band: D750 (750.0 MHz); Frequency: 750 MHz;Duty Cycle: 1:1
Medium parameters used: f = 750 MHz; σ = 0.887 S/m; ε_r = 43.048; ρ = 1000 kg/m^3
Phantom section: Flat Section

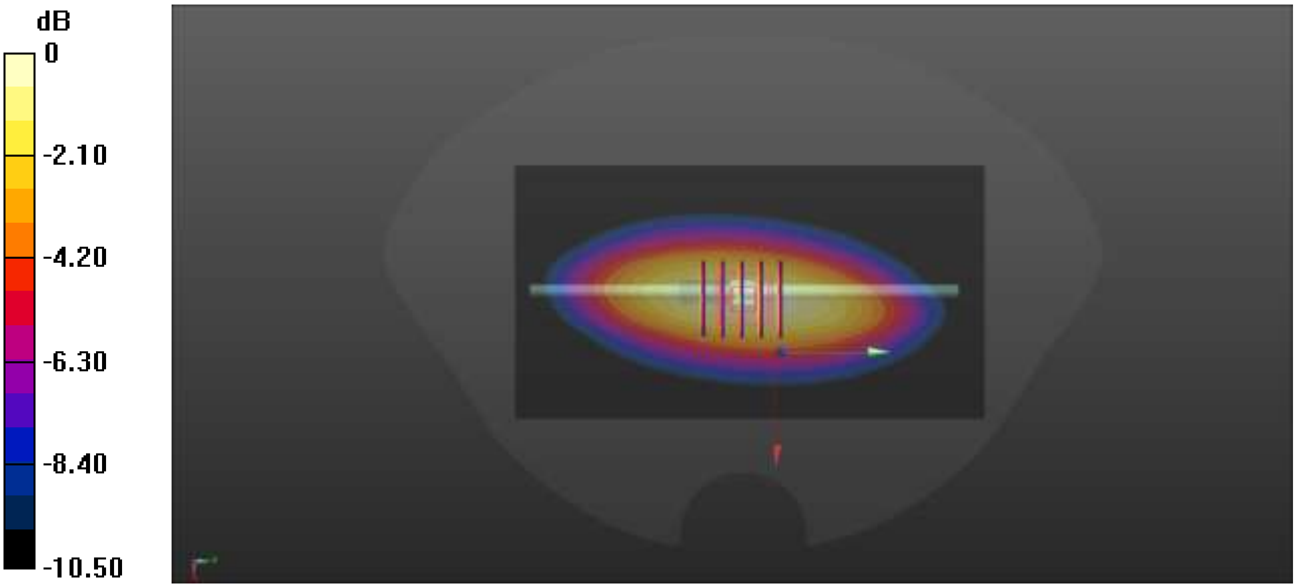
Ambient Temperature:22.5℃ Liquid Temperature:21.4℃

DASY5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(9.14, 9.14, 9.14); Calibrated: 2025/4/24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn540; Calibrated: 2025/4/21
- Phantom: Twin-SAM Right V5.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: 1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

CW750/Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.16 W/kg

CW750/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 31.16 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 1.37 W/kg
SAR(1 g) = 0.839 W/kg; SAR(10 g) = 0.552 W/kg
Maximum value of SAR (measured) = 1.16 W/kg



0 dB = 1.16 W/kg

System Performance Check Data (1750MHz)

Date: 2025/7/7
Communication System Band: D1750 (1750.0 MHz); Frequency: 1750 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1750 MHz; σ = 1.395 S/m; ε_r = 39.475; ρ = 1000 kg/m^3
Phantom section: Flat Section

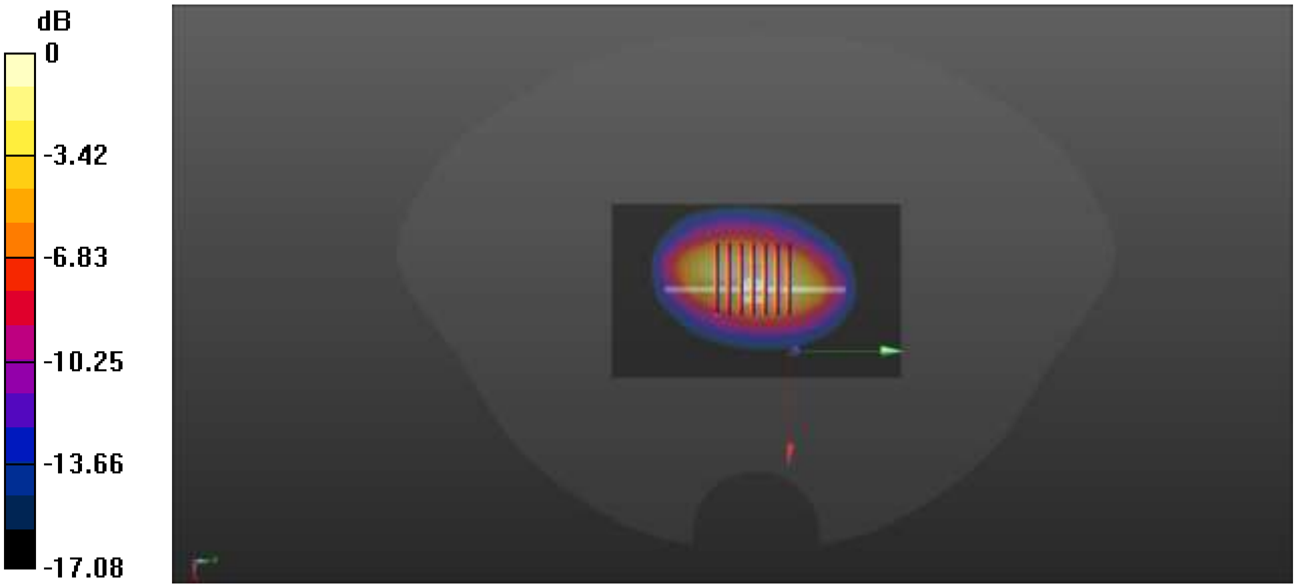
Ambient Temperature:22.5℃ Liquid Temperature:21.4℃

DASY5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(7.63, 7.63, 7.63); Calibrated: 2025/4/24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn540; Calibrated: 2025/4/21
- Phantom: Twin-SAM Right V5.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: 1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

CW1750/Area Scan (61x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 5.78 W/kg

CW1750/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 49.72 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 7.07 W/kg
SAR(1 g) = 3.69 W/kg; SAR(10 g) = 1.94 W/kg
Maximum value of SAR (measured) = 5.81 W/kg



0 dB = 5.81 W/kg

System Performance Check Data (1900MHz)

Date: 2025/7/7
Communication System Band: D1900 (1900.0 MHz); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.456 S/m; ε_r = 39.192; ρ = 1000 kg/m^3
Phantom section: Flat Section

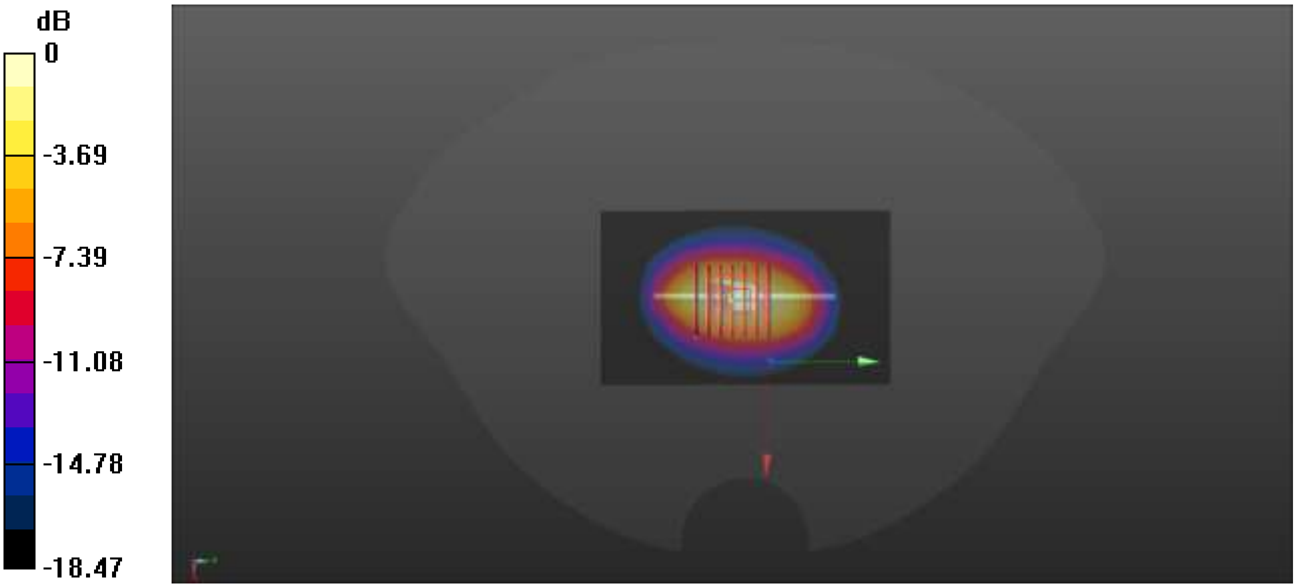
Ambient Temperature:22.5℃ Liquid Temperature:21.4℃

DASY5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(7.3, 7.3, 7.3); Calibrated: 2025/4/24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn540; Calibrated: 2025/4/21
- Phantom: Twin-SAM Right V5.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: 1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

CW1900/Area Scan (61x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 7.04 W/kg

CW1900/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 57.22 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 8.33 W/kg
SAR(1 g) = 4.36 W/kg; SAR(10 g) = 2.24 W/kg
Maximum value of SAR (measured) = 6.85 W/kg



0 dB = 6.85 W/kg

ANNEX C TEST DATA

Meas1.Body Back Side 0mm LTE-M1 B2 Ch18900
Date: 2025/7/7
Communication System Band: Band 2, E-UTRA/FDD (1850.0 - 1910.0 MHz); Frequency: 1880 MHz; Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.444 S/m; ε_r = 39.194; ρ = 1000 kg/m^3
Phantom section: Flat Section

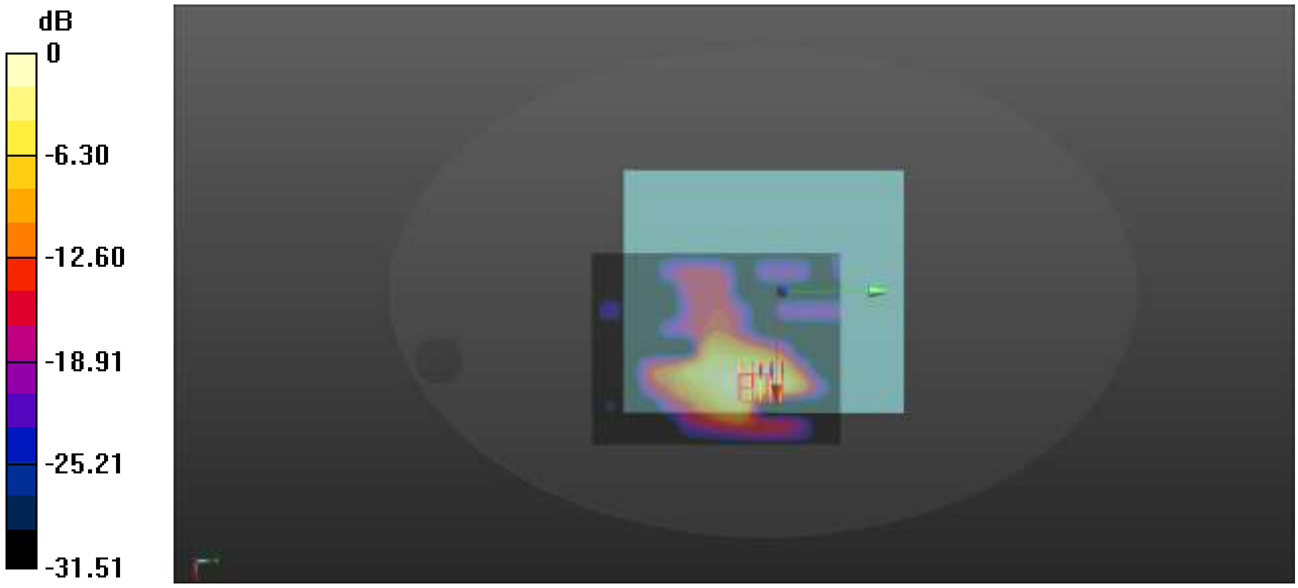
Ambient Temperature:22.5℃ Liquid Temperature:21.4℃

DASY5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(7.3, 7.3, 7.3); Calibrated: 2025/4/24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn540; Calibrated: 2025/4/21
- Phantom: ELI V4.0 (20deg probe tilt); Type: QD OVA 001 BB; Serial: 1086
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Ch18900/Area Scan (101x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.667 W/kg

Ch18900/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 0 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 0.911 W/kg
SAR(1 g) = 0.548 W/kg; SAR(10 g) = 0.229 W/kg
Maximum value of SAR (measured) = 0.721 W/kg



0 dB = 0.721 W/kg

Meas2. Body Back Side 0mm LTE-M1 B4 Ch20175
Date: 2025/7/7
Communication System Band: Band 4, E-UTRA/FDD (1710.0 - 1755.0 MHz); Frequency: 1732.5 MHz; Duty Cycle: 1:1
Medium parameters used: f = 1732.5 MHz; σ = 1.384 S/m; ε_r = 39.532; ρ = 1000 kg/m^3
Phantom section: Flat Section

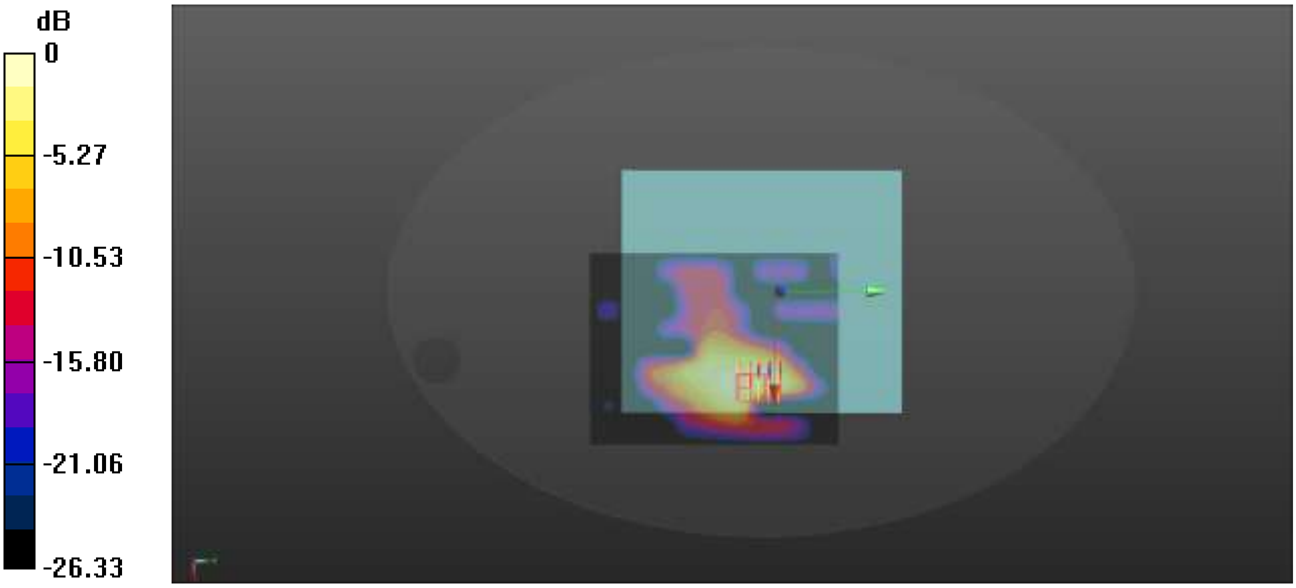
Ambient Temperature:22.5℃ Liquid Temperature:21.4℃

DASY5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(7.63, 7.63, 7.63); Calibrated: 2025/4/24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn540; Calibrated: 2025/4/21
- Phantom: ELI V4.0 (20deg probe tilt); Type: QD OVA 001 BB; Serial: 1086
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Ch20175/Area Scan (101x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.767 W/kg

Ch20175/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 0.7480 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 1.29 W/kg
SAR(1 g) = 0.490 W/kg; SAR(10 g) = 0.197 W/kg
Maximum value of SAR (measured) = 0.916 W/kg



0 dB = 0.916 W/kg

Meas3. Body Back Side 0mm LTE-M1 B12 Ch23095
Date: 2025/7/7
Communication System Band: Band 12, E-UTRA/FDD (698.0 - 716.0 MHz); Frequency: 707.5 MHz;Duty Cycle: 1:1
Medium parameters used: f = 707.5 MHz; σ = 0.889 S/m; ε_r = 43.18; ρ = 1000 kg/m^3
Phantom section: Flat Section

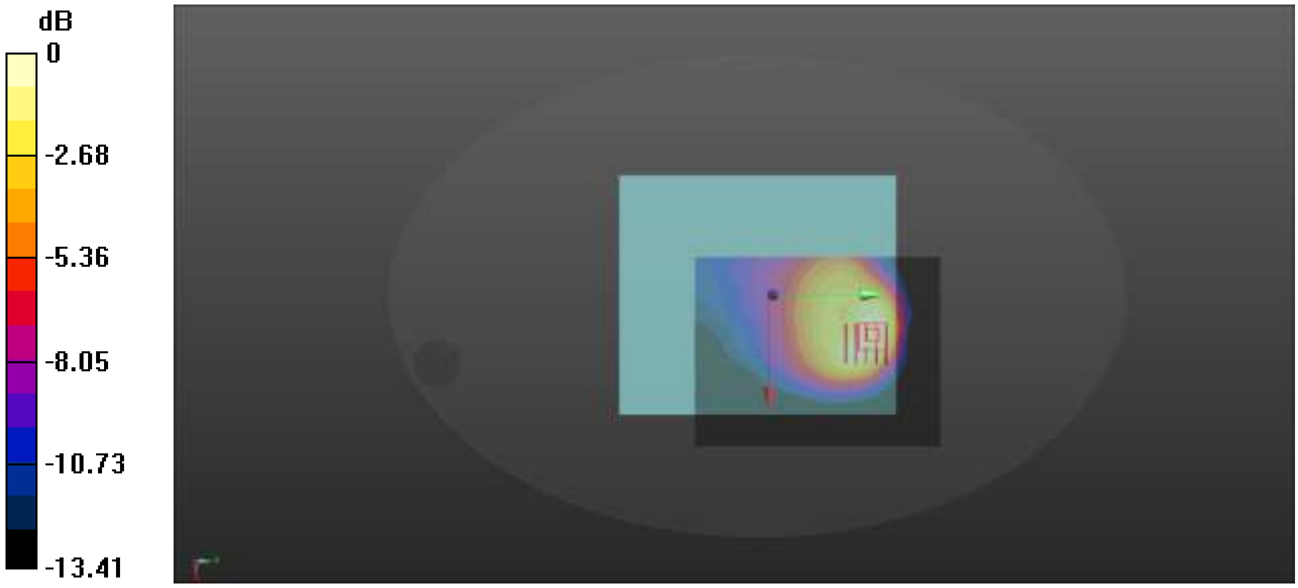
Ambient Temperature:22.5℃ Liquid Temperature:21.4℃

DASY5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(9.14, 9.14, 9.14); Calibrated: 2025/4/24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn540; Calibrated: 2025/4/21
- Phantom: ELI V4.0 (20deg probe tilt); Type: QD OVA 001 BB; Serial: 1086
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Ch23095/Area Scan (101x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.114 W/kg

Ch23095/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.606 V/m; Power Drift = 0.17 dB
Peak SAR (extrapolated) = 0.132 W/kg
SAR(1 g) = 0.068 W/kg; SAR(10 g) = 0.040 W/kg
Maximum value of SAR (measured) = 0.103 W/kg



0 dB = 0.103 W/kg

ANNEX D EUT EXTERNAL PHOTOS

Please refer the document “BL-SH2560646-AW.pdf”.

ANNEX E SAR TEST SETUP PHOTOS

Please refer the document “BL-SH2560646-AS.pdf”.

ANNEX F CALIBRATION REPORT

Please refer the document “BL-SH2560646-AC.pdf”.

Statement

1. The Testing Center guarantees the scientificity, accuracy and impartiality of the test, and is responsible for all the information in the report, except the information provided by the customer. The customer is responsible for the impact of the information provided on the validity of the results.

2. For the report with Accreditation Symbol, the items marked with "☆" are not within the accredited scope.

3. This report is invalid if it is altered, without the signature of the testing and approval personnel, or without the test report stamp.

4. The test data and results are only valid for the tested samples provided by the customer.

5. This report shall not be partially reproduced without the written permission of the Testing Center.

6. Any objection shall be raised to the Testing Center within 30 days after receiving the report.

--END OF REPORT--